

[54] SINGLE SCREEN DISPLAY SYSTEM WITH MULTIPLE VIRTUAL DISPLAY HAVING PRIORITIZED SERVICE PROGRAMS AND DEDICATED MEMORY STACKS

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[57] ABSTRACT

Multiple virtual images are built on a display screen of a text processing system by a display access method (DAM) program running interrupt identified service programs. Each of the service programs is provided with stack memory elements for retaining data to run the program. Each of the service programs is run by the DAM program in accordance with priority interrupts with a higher priority interrupt having immediate access to the DAM program. A service program having a low priority interrupt that is being run by the DAM program will be stopped by the occurrence of a higher priority interrupt with the data and address information of the interrupted program retained in the stack memory elements. The service program of the higher priority interrupt is then run and when ended the DAM program retrieves the data for the lower priority program to return to the point of interruption. This program of the lower priority interrupt is then run to an end if not again interrupted by a higher priority interrupt.

9 Claims, 7 Drawing Figures

